

REMARKS

Status Of Application

Claims 1-14 are pending in the application; the status of the claims is as follows:

Claim Amendments

An amendment to claim 11 has been made to correct a typographical error.

Allowable Subject Matter

The allowance of claims 11-14, by the Examiner, is noted with appreciation.

35 U.S.C. § 103(a) Rejection

The rejection of claims 1-10 under 35 U.S.C. § 103(a), as being unpatentable over U.S. Patent No. 5,438,869 to Mueller et al. ("Mueller Patent") in view of U.S. Patent No. 3,859,651 to Thomas, Jr. ("Thomas Patent"), is respectfully traversed based on the following.

First, Applicant notes an apparent error in the Office Action. The comments in the Office Action relating to Mueller appear to really be comments which should have been applicable to Thomas, and vice versa. For example, Mueller contains no disclosure of a pivot pin 15 contrary to the text on page 2 of the Office Action. Similarly, for example, Thomas does not have a second magnet that could be considered a bias magnet as discussed on page 2 of the Office Action.

The first step of the obviousness analysis is to determine the scope and content of the art. Thomas relates to a boom angle indicator. It includes a magnet 17 embedded in the end of pointer 12. (Col. 3, ll. 14-18). As the end of the pointer 12 moves in the arc proscribed by the travel of the end of the arm, the magnet travels along the arc on which

are positioned a number of reed switches 36-44. (Col. 3, ll. 23-26). As the crane boom deflects, the position of the arm relative to the scale 11 changes, and the position of the various magnets relative to the magnet embedded on the arm changes. The magnet actuates one of the various switches depending on the position of the magnet. (Col. 3, l. 47 et seq.). The switches activate various lights. Thus, the purpose of the invention is to provide an alert to the boom operator that design limits have been exceeded.

Mueller relates to the design of a switch for such items as burglar alarms. (Col. 1, ll. 18-24). Mueller notes that reed switches have been placed in the door frame to be activated by movement of magnet attached to the door. (Col. 1, ll. 55-66). Mueller is concerned with designing an assembly for containing the reed switch which reduces the possibility of damage to the switch and compensate for small positioning errors during installation. (Col. 2, ll. 53-59). In one aspect, an ameliorator magnet 140 can be provided. The purpose of the magnet is to decrease the required amount of magnetic flux density that is needed to cause the reeds to make contact. Thus, a greater difference in the variance of the distance between the position of the magnet on the door when closed and the switch can be tolerated and still function. (Col. 10, l. 59- Col. 11, l. 6).

The second step in the obviousness determination is to determine the differences between the invention and the art. In one embodiment, the invention relates to the provision of a switch in conjunction with a dial assembly to provide an alert signal when a predetermined liquid level of container is reached. One difference from Thomas is that the invention uses a bias magnet. One difference from Mueller is that the invention provides an assembly where there can be a first and second orientation of the poles of the dial magnet with respect to the poles of the bias magnet such that the position of the reed switch is different depending on the orientation. Thus, one pole of the dial magnet may pass the reed switch without affecting a change in the switch. Since in Applicant's view it is not necessary to discuss any additional differences, Applicant has elected not to do so.

The final step in the obviousness determination is to determine if the differences between the art and the invention would have been obvious to one of ordinary skill in the art at the time of the invention. It is noted that the art of the invention is gauges, and Mueller is clearly not related to gauges and is not analogous art.

The Office Action recognizes that Thomas alone does not render the invention unpatentable. It is only the combination of Thomas with Mueller which is argued to render various claims unpatentable. That conclusion is improper because in order to be combinable with Thomas, Mueller must be analogous art, which is either art from the same field of endeavor or art which addresses a problem that the inventor sought to solve. Mueller satisfies neither criterion. Mueller is not in the same field of endeavor, it relates to intrusion alarms not gauges. Further, it does not address one of the problems sought to be solved by the Applicant, i.e. how to allow a magnet to rotate more than 180 degrees without activating the switch twice. (See para. 6 of the application). Mueller is addressing the problem of how to increase the distance from the door magnet that the door magnet will activate the switch. Thus, the combination of Thomas and Mueller is improper and the rejection of claims 1-10 must be withdrawn.

Thomas embeds the magnet on the arm, and arranges the switches in an arc along the arc of travel of the magnet. Thus, the magnet of Thomas teaches that the magnet remains in one orientation relative to a switch. There is no teaching or suggestion in Thomas to vary the orientation of the poles of the magnet. Thus, it is clearly non-obvious from Thomas to provide a construction wherein the orientation of the poles of one magnet change with respect to anything, let alone the poles of a second magnet which Thomas does not disclose or suggest.

Even assuming that Mueller could be considered relevant art, there is nothing in either reference to suggest that varying the orientation of the poles of one magnet with respect to the poles of second magnet to effect a change in the switch status when only one of the two orientations is satisfied.

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Amendment dated August 16, 2005
Reply to Office Action of June 28, 2005

Accordingly, it is respectfully requested that the rejection of claims 1-10 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,438,869 to Mueller et al. ("Mueller Patent") in view of U.S. Patent No. 3,859,651 to Thomas, Jr. ("Thomas Patent"), be reconsidered and withdrawn.

CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Hitchcock Evert LLP's Deposit Account No. 503374.

Any fee required by this document other than the issue fee, and not submitted herewith should be charged to Hitchcock Evert LLP's Deposit Account No. 503374. Any refund should be credited to the same account.

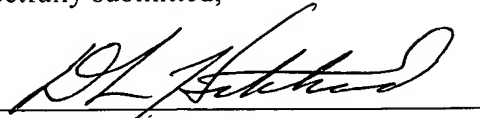
If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not submitted herewith should be charged to Hitchcock Evert LLP's Deposit Account No. 503374. Any refund should be credited to the same account.

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Respectfully submitted,

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